

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
9 June 2005 (09.06.2005)

PCT

(10) International Publication Number
WO 2005/051890 A1

(51) International Patent Classification⁷: **C07C 229/46**,
233/59, 323/32, C07D 213/38, 277/28, 277/34, 295/13,
307/52, 333/20, 407/12, A61K 31/196, 31/165, 31/341,
31/381, 31/426

13398, Research Triangle Park, NC 27709 (US). **SMALLEY, Terrence, Lee, Jr.** [US/US]; GlaxoSmithKline, Five Moore Drive, P.O. Box 13398, Research Triangle Park, NC 27709 (US).

(21) International Application Number:
PCT/US2004/038126

(74) Agents: **LEVY, David, J.** et al.; GlaxoSmithKline, Five Moore Drive, P.O. Box 13398, Research Triangle Park, NC 27709 (US).

(22) International Filing Date:
15 November 2004 (15.11.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/523,532 19 November 2003 (19.11.2003) US

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(71) Applicant (for all designated States except US):
SMITHKLINE BEECHAM CORPORATION
[US/US]; One Franklin Plaza, P.O. Box 7929, Philadelphia, PA 19101 (US).

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **CORBETT, David, Francis** [GB/GB]; GlaxoSmithKline, New Frontiers Science Park N & S, Third Avenue, Harlow Essex CM 19 5AW (GB). **DWORNIK, Kate, Anna** [US/US]; GlaxoSmithKline, Five Moore Drive, P.O. Box 13398, Research Triangle Park, NC 27709 (US). **GARRIDO, Dulce, Maria** [US/US]; GlaxoSmithKline, Five Moore Drive, P.O. Box 13398, Research Triangle Park, NC 27709 (US). **MCKEOWN, Stephen, Carl** [GB/GB]; GlaxoSmithKline, New Frontiers Science Park N & S, Third Avenue, Harlow Essex CM 19 5AW (GB). **MILLS, Wendy, Yoon** [US/US]; GlaxoSmithKline, Five Moore Drive, P.O. Box 13398, Research Triangle Park, NC 27709 (US). **PEAT, Andrew, James** [US/US]; GlaxoSmithKline, Five Moore Drive, P.O. Box

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2005/051890 A1

(54) Title: AMINOPHENYLCYCLOPROPYL CARBOXYLIC ACIDS AND DERIVATIVES AS AGONISTS TO GPR40

(57) Abstract: The present invention relates generally to novel therapeutic compounds and more particularly to novel compounds, their use as GPR40 agonists, processes for their manufacture, and intermediates useful in their preparation.